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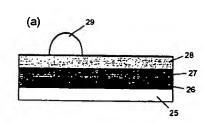
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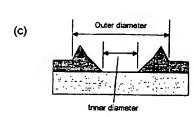
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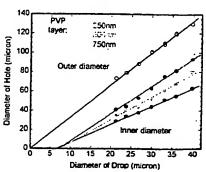
[Continued on next page]

(54) Title: FORMING INTERCONNECTS



(57) Abstract: A method for forming an electronic device, comprising: forming a first conductive or semiconductive layer; forming a sequence of at least one insulating layer and at least one semiconducting layer over the first conductive or semiconductive layer; locally depositing solvents at a localised region of the insulating layer so as to dissolve the sequence of insulating and semiconducting layers in the region to leave a void extending through the sequence of layers: and depositing conductive or semiconductive material in the void.





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putent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM). European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR). OAPI patent (BF, BJ, CF, CG, Cl, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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A CLASSIF	CATION OF SUBJECT MATTER H01L51/40 H01L21/311			
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	International Patent Classification (IPC) or to both national classificat	tion and IPC	• • • • • • • • • • • • • • • • • • • •	
B. FIELDS S	EARCHED umentation searched (classification system followed by classification	n symbols)		
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INSPEC	EPO-Internal			
C. DOCUME	NTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the rele	want passages		Relevant to claim No.
Х	WO 99 10939 A (KONINKL PHILIPS EL NV ;PHILIPS AB (SE)) 4 March 1999 (1999-03-04) the whole document	LECTRONICS		44-48
X	WO 99 12398 A (CAMBRIDGE DISPLAY; FRIEND RICHARD HENRY (GB)) 11 March 1999 (1999-03-11) the whole document	TECH		44-48
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A	US 4 140 572 A (STEIN LEONARD) 20 February 1979 (1979-02-20) the whole document			1,4
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X Fur	her documents are listed in the continuation of box C.	X Patent family	members are listed	in annex.
"A" docum consi "E" earlier filing "L" docum which citatic "O" docum other	tegories of cited documents: ant defining the general state of the art which is not detered to be of particular relevance document but published on or after the international state and which may throw doubts on priority claim(s) or is cited to establish the publication date of another in or other special reason (as specified) and reterring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed	citied to understar invention "X" document of partic cannot be considirated involve an inventification of partic cannot be considirated to considirate the considirated to considirate the considirated to comment is comme	d not in conflict with not the principle or the ular relevance; the c ered novel or canno we step when the do utar retevance; the ered to involve an in bined with one or m bination being obvio	the application but early underlying the claimed invention to counsidered to counent is taken alone daimed invention wentive step when the one other such docupes to a person skilled
	actual completion of the international search	Date of mailing of	the international sec	arch report
	9 February 2001	.18.0	5. O1	
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nt,	Authorized officer		
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C.(Continua	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 923 112 A (CLARIANT INT LTD) 16 June 1999 (1999-06-16) the whole document	1,4
A	EP 0 930 641 A (SEIKO EPSON CORP) 21 July 1999 (1999-07-21) the whole document	1
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box il Observations where unity of Invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this International application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. X No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-38,44-49
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-38,44-49

Patterning of organic insulating layers by selective etching

The prior Art describes a field effect transistor substantially consisting of organic materials.

The new features mentioned in claims 1-38 are contact holes, made in organic dielectric layers by wet etching using an ink-jet printing system to locally suply the etch liquid.

From this we can formulate an objective problem of making contact holes in organic dielectric layers by wet etching using an ink-jet printing system to locally suply the etch liquid.

The special technical features, as defined in Rule 13(2) PCT, are contact holes, made in organic dielectric layers by wet etching using an ink-jet printing system to locally suply the etch liquid.

2. Claims: 39-43

Selective doping of organic insulating layers

The prior Art describes a field effect transistor substantially consisting of organic materials.

The new features mentioned in claims 1-38 are conductive (interconnection) patterns made by selective doping organic insulating layers to make them conductive. The dopants are applied using an ink-jet printing system.

From this we can formulate an objective problem of making conductive patterns made by selective doping organic insulating layers to make them conductive, applying the dopants are using an ink-jet printing system.

The special technical features, as defined in Rule 13(2) PCT, are conductive (interconnection) patterns made by selective doping organic insulating layers to make them conductive. The dopants are applied using an ink-jet printing system.

untermation on patent family members

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